IN THE CLAIMS:

Kindly replace the claims with the following:

1. (Currently amended) A method for transmitting a multimedia bitstream in real-time between a server and a client over a packet network, the method comprising the steps of: (a) packetizing said multimedia bitstreams into a plurality of packets comprised of layers according to a predetermined scheme; (b) storing copies of the plurality of packets for a predetermined time period, which is updated by the client; (c) transmitting said stored packets in sequence to said client; and, (d) sending retransmission requests to said server, wherein said retransmission requests are sent upon the detection of a lost packet.

2. (Original) The method of claim 1, further comprising the step of retransmitting copies of lost packets to said client system.

3. (Original) The method of claim 1, further comprising the step of removing copies of the plurality of said packets if the lifetime of one of said packets is greater than said predetermined time period.

4. (Currently amended) The method of claim 1, wherein said predetermined time period is ~~updated by said client~~ based on an equation of the form:MH=[.A-inverted.i: max {GOP.sub.i+MD.sub.i+ADB.sub.i}]+RTT.sub.last,- where GOP.sub.i is Group of Pictures (GOP) length of layer i, MD.sub.i is the maximum decoding delay of layer i, ADB.sub.i is an actual delay introduced by said client system for layer i, and, RTT.sub.last is the latest estimate of the round-trip delay between said client system and said server system.

5. (Original) The method of claim 4, wherein said ADB.sub.i is computed based on the following relationship:ADB.sub.i=TE-TF.sub.i-IS.sub.i,where TE is the time when all layers signal readiness, TF.sub.i is the first packet of layer i received in said client system, and IS.sub.i is the ideal startup delay of layer i.

6. (Currently amended) A method for supporting the real-time transmission and retransmission of a multimedia bitstream between a server and a client, the method comprising the steps of: (a) receiving said multimedia bitstream; (b) transforming said multimedia bitstream into a plurality of packets having prefixes; (c) adding said packet prefixes in sequence to a list controlled by said server for a predetermined time period, which is updated by the client; (d) forwarding the plurality of said packets from said server to said client; (e) searching said list for the prefix corresponding to ~~said~~ a lost packet upon receiving a message to retransmit [[a]] said lost packet from said client; and, (f) transmitting said searched packet to said client.

7. (Original) The method of claim 6, further comprising the step of assembling the plurality of said packets into a continuous bitstream.

8. (Original) The method of claim 6, further comprising the step of determining whether one of said packets is lost based on said packet prefixes received by said client.

9. (Currently amended) The method of claim 6, wherein said predetermined time period is ~~updated by said client~~ based on an equation of the form:MH=[.A-inverted.i: max {GOP.sub.i+MD.sub.i+ADB.sub.i}]+RTT.sub.last,- where GOP.sub.i is Group of Pictures (GOP) length of layer i, MD.sub.i is the maximum decoding delay of layer i, ADB.sub.i is an actual delay introduced by said client system for layer i, and,

RTT.sub.last is the latest estimate of the round-trip delay between said client system and said server system.

10. (Original) The method of claim 6, wherein said ADB.sub.i is computed based on the following relationship:ADB.sub.i=TE-TF.sub.i-IS.sub.i,where TE is the time when all layers signal readiness, TF.sub.i.is the first packet of layer i received in said client system, and IS.sub.i is the ideal startup delay of layer i.

11. (Original) The method of claim 6, wherein said searched packet is transmitted to said client by way of a Real-Time Transport Protocol.

12. (Currently amended) A client system for receiving a multimedia file in real-time from a remote buffer from a server system, said client system and said server system being connected to a packet network, said client system comprising: a packet buffer operably coupled to store incoming packets comprised of layers sent by said server system; a depacketizer for assembling said incoming packets into a continuous bitstream; a packet processor operably coupled to said depacketizer for detecting lost packets; ~~and~~, a retransmission manager operably coupled to said packet processor for sending retransmission requests to said server system upon detection of said lost packets, and means for computing a presentation time for copies of said incoming packets in said remote buffer and providing the presentation time to the server system..

13. (Cancelled)

14. (Currently amended) The client system of claim 12, wherein said presentation time is ~~sent to said server system~~ based on the following relationship:MH=[.A-inverted-

.i: max {GOP.sub.i+MD.sub.i+ADB.sub.i}]+RTT.sub.last,where GOP.sub.i is Group of Pictures (GOP) length of layer i, MD.sub.i is the maximum decoding delay of layer i, ADB.sub.i ia actual delay introduced by said client system for layer i, and, RTT.sub.last is the latest estimate of the round-trip delay between said client system and said server system.

15. (Original) The client system of claim 14, wherein said ADB.sub.i is computed based on the following relationship:ADB.sub.i=TE-TF.sub.i-IS.sub.i,where TE is the time when all layers signal readiness, TF.sub.i.is the first packet of layer i received in said client system, and IS.sub.i is the ideal startup delay of layer i.

16. (Currently amended) A server system for transmitting a multimedia file stored in said server to a client system, said client system and said server system being connected to a packet network, said server system comprising: a packetizer for packetizing incoming multimedia bitstrems into a plurality of packets comprised of layers according to a predetermined scheme; a packet buffer operably coupled to said packetizer for storing copies of the plurality of packets for a predetermined time period, which is determined by said client system; a packet transmitter operably coupled to the packet buffer for transmitting said stored packets in sequence to said client system; and, a retransmission processor operably coupled to said packet buffer and said packet transmitter for retransmitting copies of lost packets to said client system.

17. (Original) The server system of claim 16, wherein said retransmission processor removes copies of the plurality of said packets if the lifetime of one of said packets is greater than said predetermined time period.

18. (Currently amended) The server system of claim 16, wherein said predetermined time period is ~~determined by said client system~~ based on the following relationship:MH=[.A-inverted.i: max {GOP.sub.i+MD.sub.i+ADB.sub.i}]+RTT.sub.last,where GOP.sub.i is Group of Pictures (GOP) length of layer i, MD.sub.i is the maximum decoding delay of layer i, ADB.sub.i ia actual delay introduced by said client system for layer i, and, RTT.sub.last is the latest estimate of the round-trip delay between said client system and said server system.

19. (Original) The server system of claim 18, wherein said ADB.sub.i is computed based on the following relationship:ADB.sub.i=TE-TF.sub.i-IS.sub.i,where TE is the time when all layers signal readiness, TF.sub.i.is the first packet of layer i received in said client system, and IS.sub.i is the ideal startup delay of layer i.

20. (Currently amended) A system for streaming real-time multimedia information from a server to a client over a packet network, consisting of: (a) said server for providing a multimedia bitstream by streaming the real-time multimedia information and performing retransmission, said server comprising: a packetizer for converting said multimedia bitstream into a plurality of transmission packets comprised of layers; a packet buffer for storing said transmission packets for a predetermined time period, which is determined by the client; a packet transmitter for transmitting said transmission packets; a retransmission processor for initiating retransmission of copies of said packets upon receipt of a retransmission request from said client; (b) said client comprising: a packet buffer for storing said packets of said multimedia stream received from said server; a depacketizer for assembling said transmission packets into a continuous bitstream; a packet processor operably coupled to said depacketizer for detecting lost packets; and, a retransmission manager operably coupled to said packet processor for

sending said retransmission request to said server system upon detection of said lost packets.

21. (Original) The system of claim 20, wherein said retransmission processor removes copies of the plurality of said packets if the lifetime of one of said transmission packets is greater than said predetermined time period.

22. (Currently amended) The system of claim 20, wherein said predetermined time period is ~~determined by said client system~~ based on the following relationship:MH=[.A-inverted.i: max {GOP.sub.i+MD.sub.i+ADB.sub.i}]+RTT.s- ub.last,where GOP.sub.i is Group of Pictures (GOP) length of layer i, MD.sub.i is the maximum decoding delay of layer i, ADB.sub.i ia actual delay introduced by said client system for layer i, and, RTT.sub.last is the latest estimate of the round-trip delay between said client system and said server system.

23. (Currently amended) The system of claim [[23]] 22, wherein said ADB.sub.i is computed based on the following relationship:ADB.sub.i=TE-TF.sub.i-IS.sub.i,where TE is the time when all layers signal readiness, TF.sub.i.is the first packet of layer i received in said client system, and IS.sub.i is the ideal startup delay of layer i.